

Docket No. 100202931-1

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Remarks

This Amendment is responsive to the Office Action dated July 14, 2006. Reexamination and reconsideration of **claims 1-19** is respectfully requested.

Summary of The Office Action

Claims 1-7, 10-14, and 17 were rejected under 35 U.S.C. §102(b) as being anticipated by U.S. 5,777,855 (Yokajty).

Claims 8, 15, 18, and 19 were rejected under 35 U.S.C. §103(a) as being unpatentable over Yokajty in view of US 2001/0033017 A1 (Wang).

Claims 9 and 16 were rejected under 35 U.S.C. 103(a) as being unpatentable over Yokajty in view of US 5,375,041 (McMahon).

The Amendment

Independent claims 1, 13, and 18 have been amended with regard to the configuration of the connection pads. Support for the amendments can be found, for example, from Figures 4 and 6, and from paragraphs [0015], [0020], and [0022] of the specification. Thus, no new matter has been added.

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The Claims Patentably Distinguishes Over The References Of Record

Independent Claim 1

Claim 1 has been amended to recite a plurality of connection pad arrays disposed on the substrate assembly in accordance with a predetermined warp variance of an interconnect and a configuration that connects each of the connection pads with a different terminal of the interconnect in multiple offset alignments that accommodate the interconnect being warped.

Claim 1 was rejected under 35 U.S.C. §102(b) as being anticipated by Yokajty - U.S. Patent 5,777,855. Applicant respectfully submits that Yokajty fails to teach a plurality of connection pad arrays disposed in accordance with a predetermined warp variance of an interconnect or multiple offset alignments that accommodate the interconnect being warped. For example, Yokajty Figure 4 shows one array of pads 46 and connects to a flexible circuit 60. The configuration is described in column 3, lines 56-65 as:

"Looking next at FIG. 4, it can be seen that when the flexible circuit 60 is inserted into a cut-out 32 of printed circuit board 30, the base lips 72 of notches 68 abut the apexes 47 of nocks 45, 55. In such manner, flexible circuit 60 is interlocked with printed circuit board 30 and held in spring-like fashion within cut-out 32 to thereby conform to the curved, generally convex shape of arcuate bearing rim 40 with the respective solder pads 46 of printed circuit board 30 abutting and aligned with solder pads 66 of flexible circuit 60." (Yokajty, column 3, lines 56-65) [Emphasis added]

Connection between the pads 46 and the pads 66 of flexible circuit 60 is accomplished by bending the flexible circuit 60 into the cut-out 32 (labeled in figure 2) where it is locked and held into place. Thus, a manufacturing tolerance that might offset the shape of the flexible circuit 60 is not a consideration since the flexible circuit is forced to conform to the shape of the cut-out 32 and thus conforms to the shape of the pads 46. Accordingly, the pads 46 are not configured so that the pads 46 can connect to a flexible circuit in multiple offset alignments since contact between them is controlled and configuring the pads based on a warp variance is not discussed.

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Since claim 1 recites features not taught or suggested by Yokajty, claim 1 patentably distinguishes over Yokajty and is now in condition for allowance. Accordingly, dependent claims 2-12 also patentably distinguish over the reference and are in condition for allowance.

Independent Claim 13

Claim 13 recites connection pads disposed on the substrate assembly based on a warp variance of an interconnect to form a configuration that provides contact in multiple offset alignments between the connection pads and a different terminal of the interconnect caused by warping of the interconnect during manufacture of the interconnect.

Claim 13 was also rejected under 35 U.S.C. §102(b) as being anticipated by Yokajty - U.S. Patent 5,777,855. In view of the Yokajty discussion above, Yokajty fails to teach or suggest the claimed configuration of claim 13. For example, since Yokajty teaches a flexible circuit 60 that is conformed to fit into and held against circuit board 30, Yokajty fails to teach or suggest connection pads disposed based on a warp variance of an interconnect and fails to teach or suggest a configuration that provides contact in multiple offset alignments that is caused by warping of the interconnect during manufacture.

Accordingly, claim 13 patentably distinguishes over Yokajty and should now be allowed. Furthermore, dependent claims 14-17 also patentably distinguish over the reference and are in condition for allowance.

Independent Claim 18

Claim 18 recites connection pads disposed on the first surface to form a configuration based on a warp variance of an interconnect that is determined from manufacturing the interconnect. Claim 18 was rejected under 35 U.S.C. §103(a) as being unpatentable over Yokajty in view of Wang - US 2001/0033017 A1.

Based on the previous explanation of Yokajty, Yokajty fails to teach or suggest the claimed configuration of claim 18. Wang was cited as purportedly teaching a multilayered ceramic and thus Wang fails to cure the shortcomings of Yokajty relating to the configuration of

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the connection pads. Thus, claim 18 now patentably distinguishes over Yokajty and Wang and should be allowed. Accordingly, dependent claim 19 also patentably distinguishes over the references and is in condition for allowance.

The §103 Rejections

Claims 8, 15 and 19 were rejected under 35 U.S.C. §103(a) as being unpatentable over Yokajty in view of Wang and claims 9 and 16 were rejected under 35 U.S.C. 103(a) as being unpatentable over Yokajty in view of McMahon - US 5,375,041. In view of the amendments and the explanations above, the §103 rejections are now moot.

References Cited But Not Applied

The references cited but not applied have been considered and do not teach or suggest the recited features of the respective claims, individually or in combination with each other. Therefore, all claims are in condition for allowance.

Conclusion

For the reasons set forth above, **claims 1-19** patentably and unobviously distinguish over the references and are allowable. An early allowance of all claims is earnestly solicited.

Respectfully submitted,



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